

**IN THE CLAIMS**

1. (Currently Amended) A method of starting an application program of a mobile terminal having a data terminating function, the method comprising the steps of:

- receiving a call establishment request for data termination;
- establishing a data call according to the call establishment request;
- determining the type of service specified by an application program starting message, when the application program starting message is received after the call is established;
- automatically starting an application program corresponding to the determined type of service prior to reception of service data;
- reading an IP address of a service server specified by the application program starting message, wherein the service server corresponds to the specified type of service;
- accessing the service server; and
- receiving service data of the specified type of service from the service server.

2. (Original) A method of starting an application program of a mobile terminal as claimed in claim 1, wherein establishment of the data call is performed when a data terminating function is selected.

3. (Original) A method of starting an application program of a mobile terminal as claimed in claim 1, further comprising a step of determining whether or not an appropriate application program corresponding to the type of service specified by the application program starting message exists in a memory of the mobile terminal.

4. (Original) A method of starting an application program of a mobile terminal as claimed in claim 3, wherein the application program starting message includes:

- a header for determining whether or not a received message is an application program starting message;
- type of service information;
- type of transmission data information;

service server access information; and  
service server access protocol information.

5. (Original) A method of starting an application program of a mobile terminal as claimed in claim 1, wherein the application program starting message is received through a traffic channel formed in response to establishment of the data call.

6. (Original) A method of starting an application program of a mobile terminal as claimed in claim 5, wherein the invoked application program attempts to access an application program starting server.

7. (Original) A method of starting an application program of a mobile terminal as claimed in claim 3, further comprising the steps of:

originating an absence message when no appropriate application program corresponding to the application program starting message exists in the memory of the mobile terminal; and  
ending a call connection.

8. (Currently Amended) A method of providing service data to a mobile terminal in a mobile communication system, the mobile terminal having a data terminating function, the method comprising the steps of:

receiving a request for data transmission to the mobile terminal from at least one service server;

generating an application program starting message for running one of at least one application program stored in the mobile terminal prior to reception of service data, wherein the application program starting message specifies a type of service data to be provided from the service server and an IP address of the service server;

transmitting a call establishment signal requesting data termination to the mobile terminal, wherein the call establishment signal allows transmission of the generated application program starting message to the mobile terminal;

transmitting the application program starting message to the mobile terminal through a traffic channel, the traffic channel being formed upon the selection of data termination at the mobile terminal; and

connecting the service server to the mobile terminal upon request by the mobile terminal and in accordance with the IP address of the service server for transmission of service data from the service server to the mobile terminal.

9. (Original) A method of providing service data in a mobile communication system as claimed in claim 8, wherein the service server includes a stock server in which stock data are stored.

10. (Original) A method of providing service data in a mobile communication system as claimed in claim 8, wherein the service server includes an advertisement server in which advertisement data are stored.

11. (Original) A method of providing service data in a mobile communication system as claimed in claim 8, wherein the service server includes a messenger server for providing an instant message service.

12. (Original) A method of providing service data in a mobile communication system as claimed in claim 8, further comprising the steps of:

receiving an absence signal from the mobile terminal, indicating that no appropriate application program corresponding to the type of service specified by the application program starting message exists in a memory of the mobile terminal; and

transmitting a download request message to the mobile terminal, requesting that the mobile terminal download an appropriate application program.

13. (Currently Amended) A method of starting an application program of a mobile terminal having a data terminating function, the method comprising the steps of:

receiving a call establishment request for data termination;

establishing a data call according to the call establishment request;  
automatically starting an application program corresponding to the type of service specified by the call establishment request prior to reception of service data;  
reading an IP address of a service server specified by the call establishment request, wherein the service server corresponds to the specified type of service;  
accessing the service server; and  
receiving service data of the specified type of service from the service server.

14. (Original) A method of starting an application program of a mobile terminal as claimed in claim 13, wherein establishment of the data call is performed when a data terminating function is selected by the mobile terminal.

15. (Original) A method of starting an application program of a mobile terminal as claimed in claim 14, further comprising a step of examining whether or not an application program corresponding to the type of service specified by the call establishment request exists in a memory of the mobile terminal.

16. (Original) A method of starting an application program of a mobile terminal as claimed in claim 15, wherein the call establishment request includes type of service information, type of transmission data information, service server access information, and service server access protocol information.

17. (Original) A method of starting an application program of a mobile terminal as claimed in claim 16, wherein the invoked application program attempts to access an application program starting server.

18. (Original) A method of starting an application program of a mobile terminal as claimed in claim 16, further comprising the steps of:

originating a service denial message when no appropriate application program corresponding to the call establishment request exists in the memory of the mobile terminal; and ending the call connection.